

Periaortic Lymphoma Mimicking Rupture in a Patient With HIV and Abdominal Aortic Aneurysm

Mohammed M. Chaudry, MD, Justin Nelms, MD, Rajabrata Sarkar, MD, PhD. University of Maryland, Baltimore, Md

Sponsored by Brajesh K. Lal, MD

Objective(s): Periaortic lymphoma can both mimic and be related to aortic disease, such as dissection, intramural hematoma, aneurysm, and penetrating ulcer. Misdiagnosis by computed tomography (CT) scan may lead to inappropriate surgery or an unexpected intraoperative or postoperative course. The use of computed tomography angiography (CTA) along with aortic duplex imaging may be useful in patients with known or increased suspicion of lymphoma or HIV.

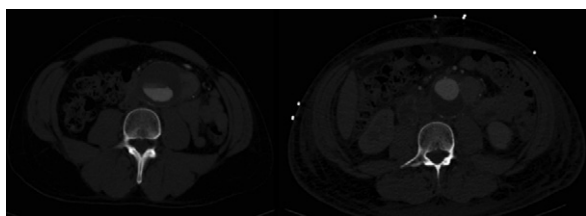


Fig.

Methods: A 40-year-old man with known history of hypertension, HIV, and abdominal aortic aneurysm (AAA) presented with 3 weeks of progressively worsening abdominal pain. CTA of the abdomen demonstrated a new 3-cm enhancing aortic protrusion consistent with focal leak, indicating urgent operative repair.

Results: The patient underwent open repair of an infrarenal AAA with 26-mm Dacron tube graft. Aneurysm contents were identified pathologically as “aorta lumen” and “organizing thrombus.” Persistent postoperative pain prompted a CTA on day 11 showing “persistent contained aneurysmal leak.” Aortoiliac duplex imaging was negative for any evidence of leak. CTA on day 18 demonstrated an interval increase in the size of the contained leak, prompting re-exploration. The aortic repair was intact, and the “leak” was identified as a mass within the aortic wall. Resection and pathologic examination revealed a poorly differentiated malignant neoplasm. Bone marrow biopsy confirmed diagnosis of plasmablastic lymphoma.

Conclusions: Periaortic lymphoma can be challenging to diagnose in the setting of a concurrent AAA. The overlap in imaging similarities in this patient between aneurysm leak and periaortic malignancy illustrates the need to consider re-exploration of patients with new or persistent symptoms.

Delayed Snorkel Revascularization of Left Subclavian Artery After Thoracic Endovascular Aneurysm Repair for Trauma

Amy B. Reed, MD. Penn State Hershey College of Medicine, Hershey, Pa

Objective(s): Coverage of the left subclavian artery to gain a proximal landing zone when performing thoracic aortic transection for traumatic aortic injuries can result in disabling left upper extremity claudication and subclavian steal when reoperative carotid-to-subclavian bypass grafts fail. Endovascular options may be useful in revascularization.

Methods: The records and images were reviewed of a 35-year-old left-handed tree cutter in whom thromboembolism of a left carotid-to-subclavian bypass had failed twice in the setting of thoracic aortic stenting for blunt aortic trauma.

Results: Left brachial and femoral access was gained. A 5F glide-catheter and wire were gently advanced alongside the aortic stent via a retrograde subclavian artery approach, and entrance was gained into the aortic arch. A kissing-balloon technique was used with an aortic balloon and balloon-expandable covered stent in the left subclavian artery, with recovery of a palpable left radial pulse and relief of symptoms.

Conclusions: A delayed snorkel technique in the left subclavian artery can serve as a bailout option when carotid-to-subclavian bypasses fail in the setting of thoracic stent grafting.

First Report of Successful Percutaneous Transgluteal Coil Embolization of Bilateral Internal Iliac Artery Aneurysms via Direct Superior Gluteal Artery Access

Nii-Kabu Kabutey, MD, Andrew Meltzer, MD, Peter Connolly, Darren Schneider. New York Presbyterian Hospital, Weill Cornell Medical College, New York, NY

Objective(s): Proximal surgical ligation of internal iliac artery (IIA) aneurysms (IIAAs) without occlusion of the outflow vessels can lead to continued aneurysm expansion and possible rupture from retrograde flow. Surgical exposure within a deep pelvis with a large aneurysm can be a challenging and morbid operation. Percutaneous embolization options are limited because there is no direct antegrade access to the aneurysmal sac. We describe the first case of bilateral percutaneous transgluteal coil embolization to treat surgically excluded bilateral IIAAs.

Methods: A 68-year-old woman who previously underwent aortobiliac bypass with ligation of both proximal IIAs presented with expanding bilateral IIAAs measuring >5 cm in diameter. Computed tomography angiography demonstrated significant interval increase in the size of both aneurysms. Aortography confirmed retrograde filling of the IIAAs from gluteal branches. Initial transarterial embolization via collaterals was attempted but was unsuccessful due to severe tortuosity of the collateral vessels. To obtain access to the aneurysm sac and feeding vessels, a percutaneous transgluteal approach was performed. Bilateral femoral access was obtained to allow for angiographic roadmapping of the pelvic collateral vessels perfusing the aneurysms before placing the patient in a prone position. A 21-gauge Chiba needle and 0.018-inch guidewire were used to directly access the superficial branches of both superior gluteal artery branches at level of the ischial spine. Under fluoroscopic guidance, 4F sheaths were inserted once the intraluminal position was angiographically confirmed. Angiography demonstrated the left IIAA was perfused by the left superior and inferior gluteal arteries and the right IIAA was perfused predominantly by the right superior gluteal artery. Selective embolization of the individual feeding vessels and the aneurysm sacs were performed using a coaxial 4F catheter and 3F microcatheter system.

Results: Completion angiography demonstrated bilateral aneurysmal occlusion. Hemostasis was obtained by injecting the sheath tracts with a gelfoam slurry and manual compression. The patient tolerated the procedure without any complications.

Conclusions: Percutaneous transgluteal coil embolization of IIAAs is a feasible, minimally invasive approach when a transarterial access is not possible due to prior surgical or endovascular occlusion of the IIA origin.

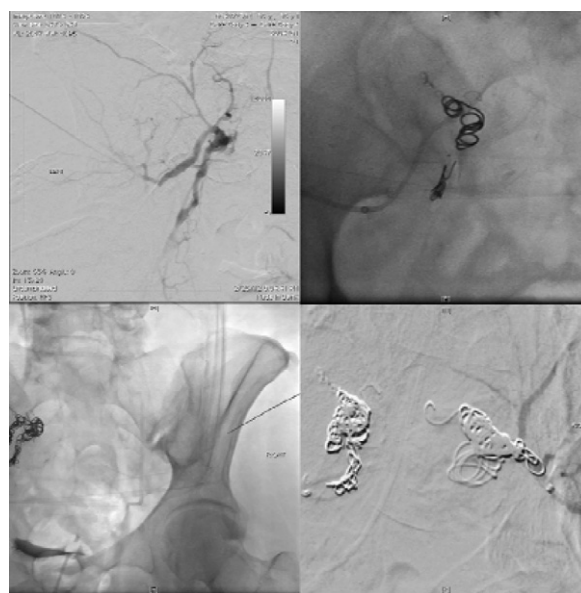


Fig.